

Assessment of Russian Stock Market Attractiveness for Foreign Investors

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Abstract. Issues of assessing the attractiveness of the Russian stock market for foreign investors seem very interesting and relevant. So, at present, Russian and foreign researchers have examined the features of the stock market and the factors affecting its attractiveness, methods and indicators for assessing the attractiveness of issuers and the stock market, have assessed the state and development trends of the Russian stock market, as well as the foreign investors' operation in the market, etc. The research proposes a technique for assessing the attractiveness of the Russian stock market for foreign investors based on an integrated attractiveness index. The work also studied the key components of the proposed index and made its computation for the Russian stock market for the period of 2007-2017. Based on the computation, we found that the Russian stock market attractiveness for a foreign investor can be described as average or satisfactory, but in its dynamics it is approaching a good mark. In turn, foreign investors can invest in Russian securities from the perspective of the economic situation in the country and the state of stock market instruments.

1. Introduction

It should be noted that the Russian stock market is not yet attractive enough for foreign investors. But this market has its own advantages and development prospects. It is important to reasonably convince investors of the advisability of investing into it. Investments, including foreign ones, will in themselves contribute to the development of Russian companies in both the field of their main operation, financial results improvement, economic efficiency, and their operation directly on the stock market. An attractive market accumulates investments, thus creating opportunities for further

development, indicators improve, and the attractiveness of the market increases even more. However, in the case of low attractiveness of financial investments, the opposite pattern applies.

Therefore, the development and testing of the technique for the comprehensive assessment of the Russian stock market attractiveness for foreign investors is of great importance. First of all, this is about the share market as the most popular and promising one.

2. Methods

Currently, a number of methods for assessing the attractiveness is proposed by Russian authors. Thus, I.V. Karev offers a model for assessing the investment attractiveness of the market with the use of fuzzy logic tools [6]. The method includes an assessment of the status of an issuer - a potential object of investment, including the competitiveness and quality of products, the market position, the structure of capital, the investment policy, economic performance indicators, and corporate governance. It is proposed to use a fuzzy triangular distribution function for this purpose.

When assessing the attractiveness of the stock market, P.P. Loginov suggests using the fuzzy sets theory with the construction of special vectors and matrices [15]. Well-known experts in the stock market A.O. Nedosekin [12] and G.A. Gunin [3] agree on a similar approach. It is proposed to forecast stock market indices using neural networks and specialized computer programs.

N.E. Egorova, A.R. Bakhtizin and K.A. Torzhevsky suggest using economic and mathematical models to forecast the state of the stock market taking into account the assessment of its information sensitivity (to current events) and system sensitivity (to the state of the real sector of the economy) [1].

The Markovitz' method [10], the SARM method [8], the VaR-models [7] and some others are also quite popular. These methods and models make it possible to assess and forecast the state of the market by means of economic and mathematical modeling.

An undoubted advantage of the above methods and models is their profound mathematical rationale that increases the accuracy of assessment. However, this advantage changes to the opposite, particularly for foreign investors, because of the need in the accurate translation. The models require skills and expertise in mathematics and their application in economics. But not every potential investor has such background. In addition, many methods focus on assessing the attractiveness of individual issuers or groups of issuers. But this assessment is not equal to the assessment of the attractiveness of a stock market as a whole. Moreover, this applies to the so-called non-market approach to the assessment of the attractiveness of issuers - for example, based on the book value of assets [9]. Such assessment is more suitable for building partnerships with an enterprise in question than for identifying the profitability and risks of investments in stock market instruments.

An investor, a foreign investor in particular, needs an assessment technique with the distinctive features as follows: a) clear and simple computation, evaluation and interpretation of the results; b) short checklist; c) availability of data required for the computation; d) assessment comprehensiveness.

This technique is especially important for individuals (retail investors), who, as researches show, often make their decisions relying not on the quantitative analysis, but on past experience and their psychological state [5]. Decision making by individuals in the stock market is often strongly influenced by emotions or the ratio of hopes and fears [2]. Thereat, the results of investment decisions can naturally differ much from the expected ones; risks increase [5].

But the key problem for investors is often not in assessing the operation of an individual company, but in analyzing the state and prospects of the stock market as a whole. The stock market also does not exist in isolation from the national and global economic and political situation, on the contrary, it depends heavily on them. Therefore, the technique should take into account, on the one hand, general macroeconomic indicators, on the other hand, specific indicators of the stock market functioning.

Eventually, the investor needs an answer to the specific question - to what extent the market in its current state is able to provide profitability and safety of his investment.

It seems advisable to develop and apply a technique for rapid assessment of stock market attractiveness using an integrated index of attractiveness (A_{int}).

3. Results

Based on the computation of certain local indicators, the integrated indicator of macroeconomic attractiveness (A_M) for 2007-2017 should be determined by formula (1):

$$A_M = (A_{GDP} + A_{inf} + A_{cur} + A_{unem}) / 4 \tag{1}$$

where A_{GDP} is the attractiveness of the stock market in terms of GDP growth rates;

A_{inf} – the attractiveness of the stock market in terms of inflation rates;

A_{cur} – the attractiveness of the stock market in terms of exchange rate growth;

A_{unem} – the attractiveness of the stock market by unemployment rate.

See Fig.1 for the computation results.

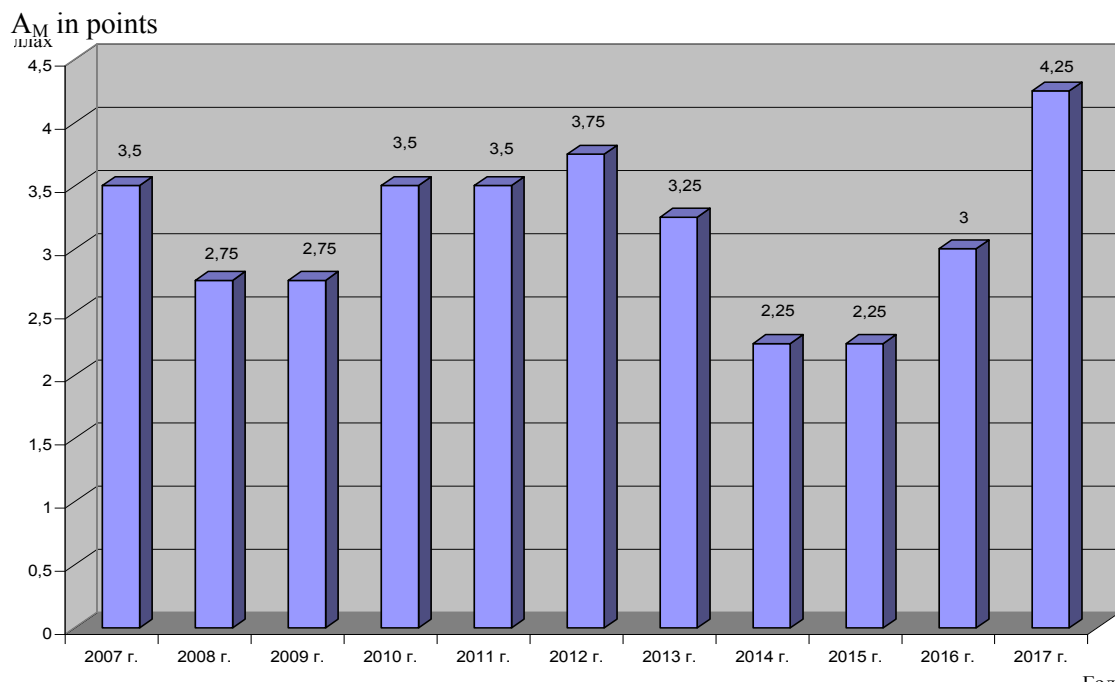


Figure 1. Change in the macroeconomic attractiveness of the Russian stock market (A_M) for 2007-2017, in points.

Thus, despite the significant periodic downturns, the macroeconomic attractiveness index of the Russian stock market generally demonstrates a growth trend. In 2007, it was average and assessed as satisfactory; in 2008-2009, it experienced a significant drop to unsatisfactory estimates due to the financial and economic crisis. After the Russian economy emerged from the recession in 2010-2013, the index was stable and satisfactory. In 2014-2015, a new, even deeper decline occurred. However, starting from 2016, the macroeconomic attractiveness began to increase and in 2017, for the first time in the study period, it reached an estimate of 4.25 points, which can be assessed as “above average” or “good”. This was due to significant increase in real GDP, low annual inflation rate and moderate strengthening of the ruble.

Therefore, from the point of view of the general state of the Russian economy in 2017, investors can be quite confident in the safety and profitability of their investments in the stock market.

But the investor should make a decision based not only on macroeconomic indices, but also on the state of specific indicators characterizing the dynamics of stock market instruments. It seems appropriate to use a number of major indices used at the Moscow Exchange as a basis for assessing the attractiveness. Such indices include [11] Moscow Exchange Index (IMOEF), previously called MICEX Index; RTSI Index (RTSI); Blue Chip Index (RTSSTD); Medium and Small Capitalization Index (MCXSM); and Broad Market Stock Index (MICEXBMI).

Computation and analysis of the Moscow Exchange indices in dynamics allow to considerably identify changing trends in the attractiveness of stock market instruments. But for an overall assessment, it is also important to take into account the change in the trading volume of shares on the Russian stock exchange market. This will answer the question of how dynamically the organized stock market is developing. Relevant data for 2006-2017 are presented in Fig. 2 [11; 13].

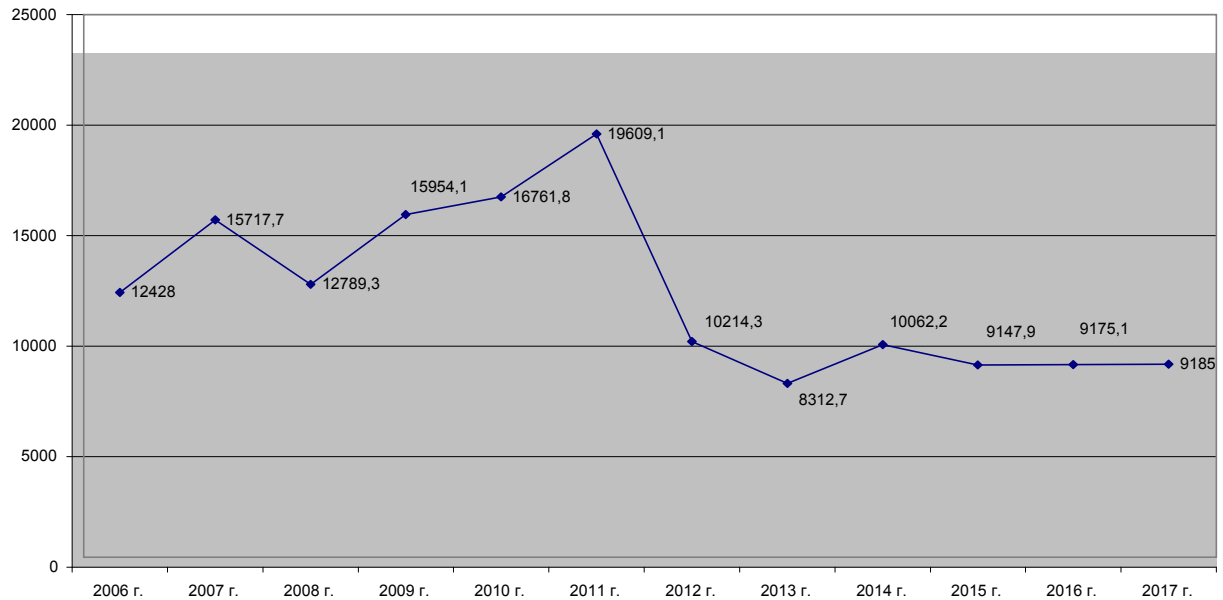


Figure 2. Change in trading volumes of shares on the Russian stock exchange market in 2006-2017, billion rubles.

The data presented show an uneven change in stock trading volume. In 2008, it shrank, which can be explained by the financial crisis. But a sharper drop happened in 2012-2013, while most stock exchange indices showed growth at that time. This means that the demand for shares of Russian companies is not high enough and decreases in certain periods. In addition, the decrease in trading volumes can be explained by the departure of some less efficient issuers from the organized market.

In general, despite the increase in majority of the main stock exchange indices, the volume of share trading on the Russian stock exchange market did not increase over the study period, but even slightly decreased. See Fig. 3 [11; 13] to illustrate the dynamics of annual growth rates of trade volumes for 2007-2017.

The quoted data show that the growth rates of trading volumes are subject to significant fluctuations over the years, and negative growth is rather often. The decline was particularly strong in 2012, and currently the growth rate is only slightly above zero. In 2016-2017, with a significant increase in stock exchange indices, trading volumes practically did not grow. On the one hand, such a mismatch of trends in market indices change and trading volumes may indicate a time lag between changes in stock capitalization and changes in demand for them.

On the other hand, the decrease or current stagnation of trading volumes in itself has a negative impact on the overall attractiveness of the stock market; it serves as a factor that can prevent investors from participating in the market. This may be a kind of an endless circle, when a decrease in trading volumes serves as a signal for a decrease in demand for stocks, causing an even greater drop in trading.

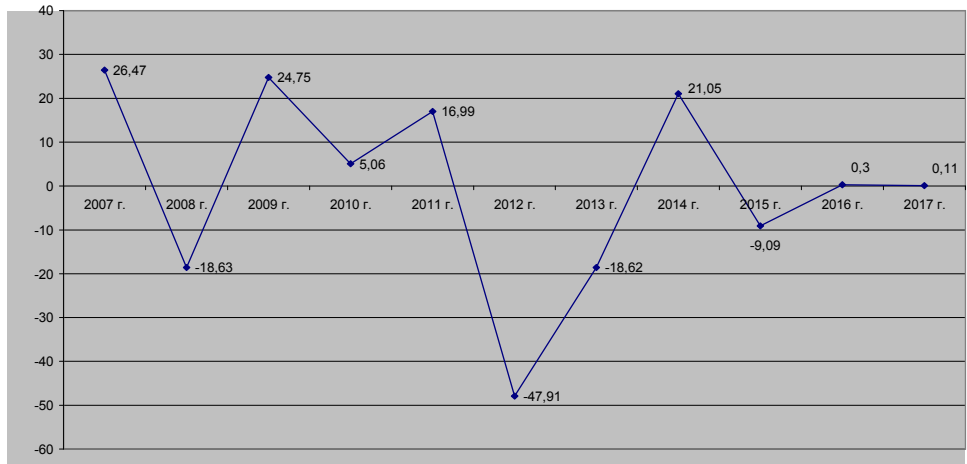


Figure 3. Growth rate of share trading volumes on the Russian stock exchange market in 2007-2017, in percent.

Finally, another important characteristic of the attractiveness of stock market tools is the share of stock capitalization in national GDP. Changes in this indicator for 2012-2017 are shown in Fig. 4 [14].

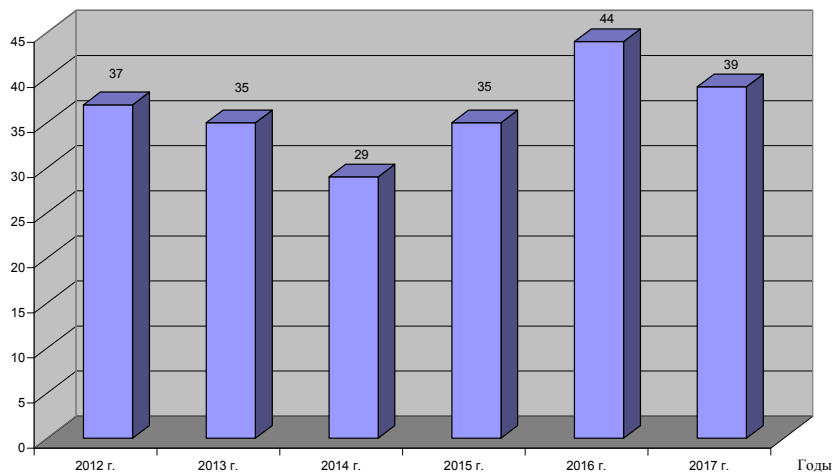


Figure 4. Change in the share of the stock market capitalization in national GDP for 2012-2017.

The quoted data show that the share of capitalization of the stock market in GDP for the reviewed period changed insignificantly. In 2014, this share considerably decreased, as the stock market suffered a drop due to the negative impact of economic sanctions and an exchange rate depreciation. Later on, some growth was observed, but no significant increase in the indices occurred. This means that the relative size of the stock market in relation to real production expressed by GDP is not yet large enough in Russia [4, 16]. An increase in this share of capitalization of the stock market in GDP is required, which will mean an increase in the role of the stock market in the Russian economy and its investment attractiveness.

The assessment of local indicators of the attractiveness of Russian stock market instruments suggest us the following conclusions. Although the growth rate of the Moscow Exchange Index IMOEF for the most part of the reviewed period was positive, it was yet not high enough. As a result, the attractiveness of the stock market for the whole period decreased from “above average” to

“satisfactory”. On the contrary, the RTSI Index growth rate, despite the unevenness of its changes and deep downturns in some years, showed significant growth in 2017. That year's attractiveness, like in 2007, got the highest score for this indicator. The growth rate of the Blue Chip Index was calculated only for a part of the period and was not high enough, therefore, the attractiveness in terms of this index was just average in 2017.

After the recession in 2014, a significant increase in the growth rate of the Medium and Small Capitalization Index occurred, and the attractiveness was well appreciated. The growth rate of the Broad Market Index was lower. According to the Broad Market Index, the attractiveness was not high enough and had only a satisfactory rating.

The market attractiveness index in terms of the trading volumes growth was a difficult situation. Over the entire study period, the index remained low and at times, for example, in 2012, showed heavy decline. Currently, the attractiveness in terms of this index can only be assessed as average or satisfactory.

The share of the stock market capitalization in national GDP is rather sustained but does not show any significant growth trends. Nevertheless, the attractiveness index is well appreciated due to the fact that anyway the capitalization of the stock market in the GDP consistently exceeds 30 percent.

Based on the given above local indicators, the integrated index of the attractiveness of stock market instruments (A_S) should be calculated. It should be noted that for years, in which some indicators have not been calculated due to lack of data, the integrated index is computed as the simple average of the known data for a relevant year.

The computation results are given in Fig. 5.

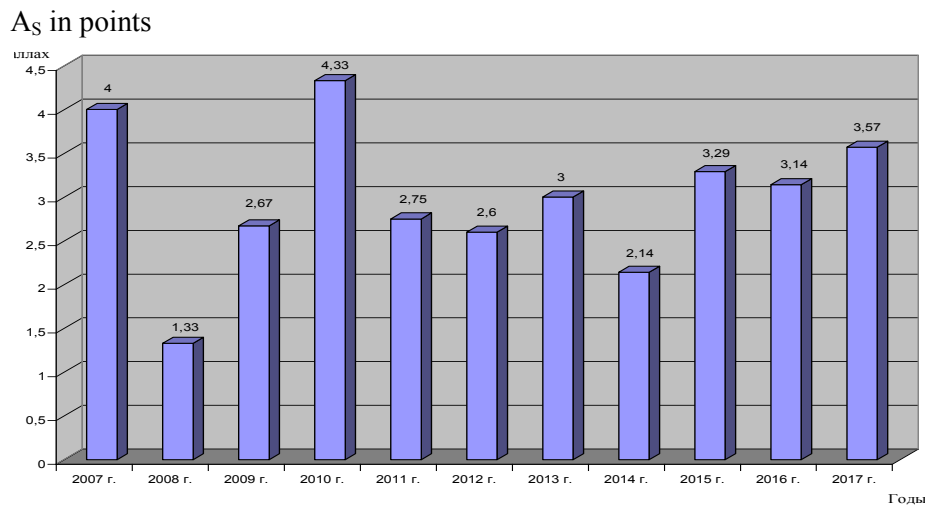


Figure 5. Change in the integrated index of attractiveness of the Russian stock market instruments (A_S) in 2007-2017, in points.

The results show that the scoring of the attractiveness of the Russian stock market instruments for the study period experienced significant fluctuations. In 2007, at the peak of the market growth, the index was estimated at 4 points or “above average”. The following year, due to the sharp decline on the market, it dropped to an extremely unsatisfactory level (less than 2 points). The growth began in 2009, however, the attractiveness of stock market instruments was still assessed as unsatisfactory. But already in 2010, when the main market indices showed significant growth, this index reached its maximum over the study period - 4.33 points. Nevertheless, it was not possible to keep that maximum, and the index dropped again to unsatisfactory level in 2011.

This may be due to a sharp drop in trading volumes, as well as the start of computation of new local indicators, which were not high enough. After some growth to satisfactory level in 2013, a new

significant drop in the attractiveness of stock market instruments happened a year later. This was affected by the recession in the market because of the economic sanctions imposed against Russia.

In recent years, an uneven growth of this index has been observed. However, it reached only the average or satisfactory level of the attractiveness of the market. In general, the attractiveness associated with specific characteristics of the stock market is lower than the macroeconomic attractiveness of the market.

Next, an integrated index of the higher order stock market attractiveness A_{int} should be computed as the simple average of A_M and A_S . The results of the computation of the integral index for 2007-2017 are given in Fig. 6.

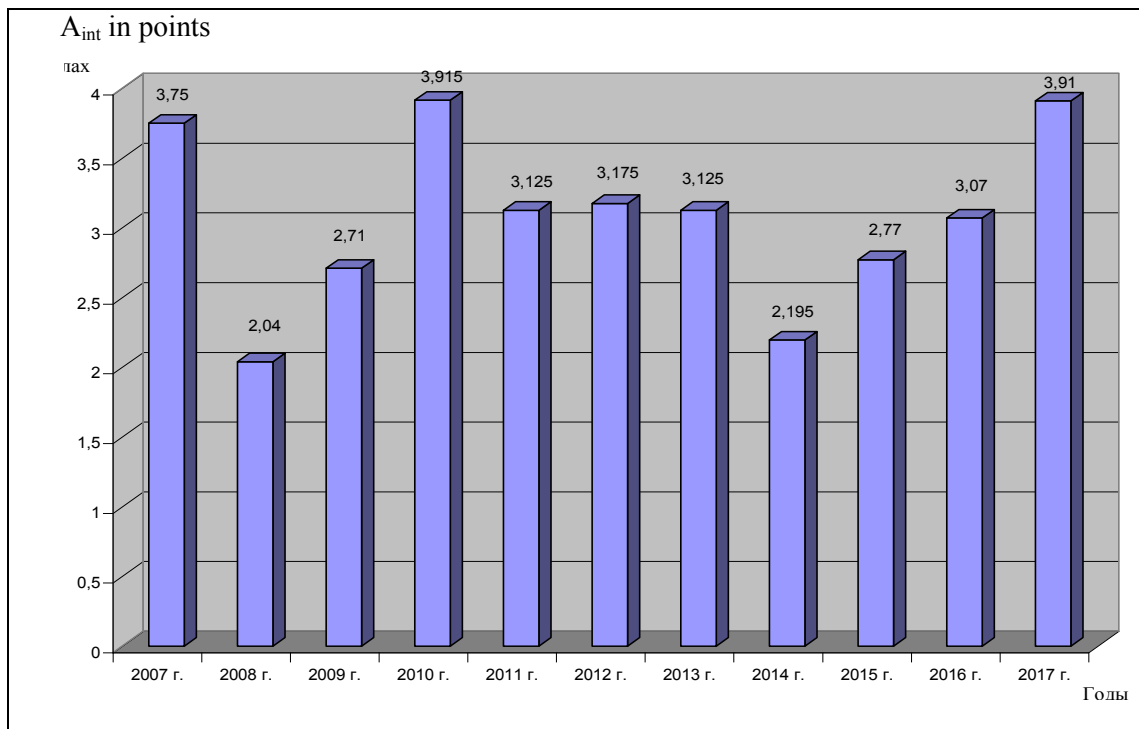


Figure 6. Change in the integrated index of the Russian stock market attractiveness (A_{int}) for 2007-2017, in points.

The data show that the integrated index of Russian stock market attractiveness has changed insignificantly over the whole study period. The score increased from 3.75 points to 3.91 points. This means that the Russian stock market attractiveness has slightly raised, but yet remained within the limits of average or satisfactory level. At the same time, the integrated index of the stock market attractiveness was subject to significant fluctuations over this period. A sharp drop was recorded in 2008, and a bit less recession was recorded in 2014. In both cases, the assessment of the market attractiveness was only slightly above 2 points or unsatisfactory. The index reached its maximum value in 2010. (3,915 points). However, even in this case, the attractiveness was assessed as “average”, and for all the surveyed years the index never scored 4 points.

Since 2014, the integrated index of the stock market attractiveness has been steadily increasing. In 2017, it amounted to 3.91 points, which means that the stock market attractiveness is gradually approaching the above average or good level, although so far it remains within the limits of satisfactory level.

4. Conclusion

The results of the integrated assessment show that the stock market attractiveness is average or satisfactory approaching a good level. From the perspective of the economic situation in the country

and the state of stock market instruments, foreign investors can now invest in securities of Russian companies. However, they should be cautious and invest mainly in the shares of the companies that participate in building indices of the Moscow Exchange. Do not invest too much at once, distribute the investment between the shares of a number of companies and take into account short-term market fluctuations and changes in the macroeconomic and political situation.

The negative dynamics of trading volumes lagging behind the dynamics of market indices indicates that the market needs investments in stocks to improve performance and, as a result, to increase its attractiveness. Thus, the inflow of investments into the stock market will itself contribute to the growth of its attractiveness for further investments.

Meanwhile, stimulating the growth of investment, including foreign ones, requires further steps to increase the investment attractiveness of the stock market. The development of such steps is especially important because of the possibility of further increase of the stock market attractiveness, which will already mean its qualitative change - the transition to the above average level.

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